Completion of SNS RFQ Cold Model Fabrication and Assembly.

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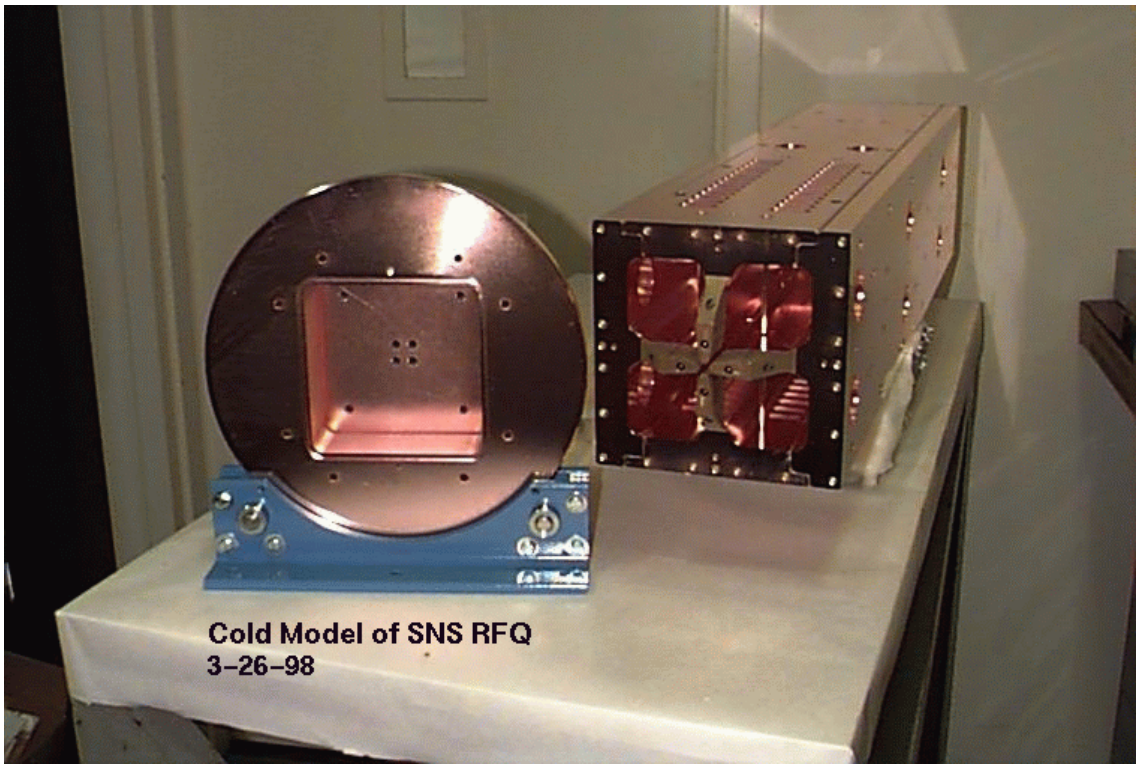
Technical Note FE-ME-001

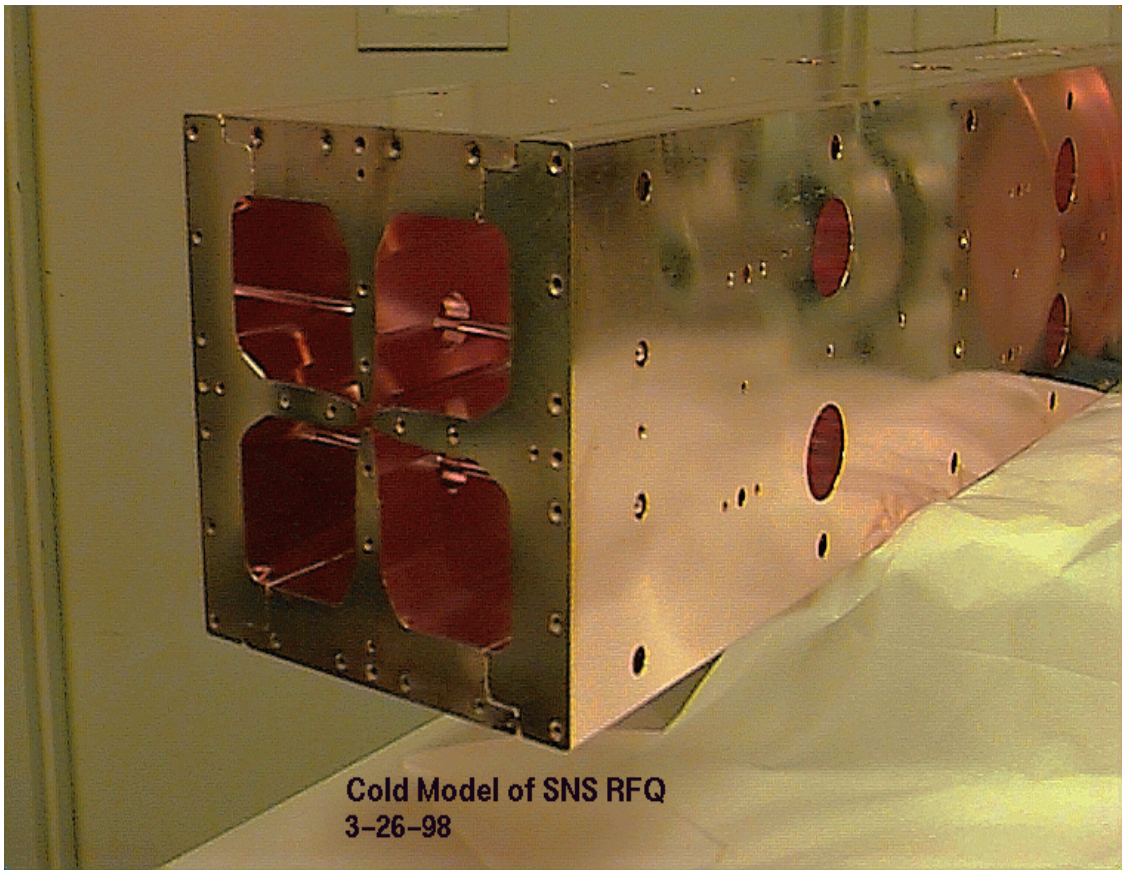
The SNS RFQ Cold Model fabrication and assembly has been completed. The cavity is full scale in cross section and one quarter the length of the production RFQ. The Cold Model will be used for frequency and Pi-mode stabilizer rod analysis. The vane tips on the Cold Model are not modulated.

The model's cavity measures 34 inches in length and is constructed of copper plated aluminum. Twelve adjustable tuners are distributed along the length of the cavity and adjustable end caps seal the ends. Twelve Pi-mode stabilizer rods are included with the cavity and mock-ups of the vacuum and rf drive ports are machined into the model.

Fabrication took place at LBNL during the months of February and March. Copper plating of the aluminum was done at LLNL by LBNL staff.

The first Cold Model tests of the SNS RFQ were analyzed on 3-31-98. A quadrupole mode of 405.3 MHz with Pi-mode stabilizer bars and tuners, was measured by John Staples and Akira Ueno, visitor from KEK.




Cold Model of SNS RFQ
3-26-98


Cold Model of SNS RFQ
3-30-98
Initial frequency measurement
LBNL Bld. 71 Rm. 172
NO SMOKING